

## **Hellbranch Run Watershed Protection Overlay**

### **3372.900 - Purpose.**

Repealed by Ordinance 2431-03.

### **3372.901 - Findings, purpose, and implementation.**

- A.** Findings. The Big Darby Creek is both a national and state scenic river and is among the top five warm freshwater habitats in the nation. The Big Darby is the home to endangered and rare species of fish and other organisms. The Hellbranch Run is tributary to the Big Darby, and the water quality of the Hellbranch Run has a direct impact on the Big Darby. Unrestrained development would threaten this natural resource by encouraging flooding, and by degrading the water quality of the Hellbranch and the Big Darby. Natural resource protection is inherently linked to the quality of life and the character of our community. It is hereby determined that the system of streams and other natural watercourses within the Hellbranch Run watershed contributes to the health, safety, and general welfare of the residents of the community.
- B.** Purpose. The purpose of the Hellbranch Run watershed protection overlay is to safeguard the public health, safety and welfare through the use of reasonable and practicable development standards in the portion of the Hellbranch Run watershed which lies outside of the proposed environmentally sensitive development area to minimize development impacts to the Hellbranch Run and the Big Darby Creek. These measures are intended to:
  - 1.** Assure that development design and activities will not impair the ability of riparian areas to:
    - a.** Reduce flood impacts by absorbing peak flows, slowing the velocity of flood waters, and regulating base flow;
    - b.** Reduce pollutants in watercourses during periods of high flows by filtering, settling, and transforming pollutants already present in watercourses and in runoff before they enter watercourses;
    - c.** Provide shade and food which are essential components of high quality stream ecosystems; and
    - d.** Provide habitat to a wide array of wildlife by maintaining diverse and connected riparian vegetation.
  - 2.** Reduce bank erosion, channel degradation, aggradation, and downcutting as a result of modification of land use while still allowing for the natural transport of bedload and sediments and maintenance of the stream's natural ability to adjust its position, dimension, pattern and profile.
  - 3.** Benefit the city economically by minimizing encroachment on watercourse channels and the need for costly engineering solutions such as retention basins, and rip rap to protect structures and reduce property damage and threats to the safety of watershed residents; and by contributing to the scenic beauty and environment of the city, and thereby preserving the character of the city, the quality of life of the residents of the city, and corresponding property values.
- C.** Implementation. To implement this overlay, the city will adopt a three tiered approach to its development decisions in the portion of the Hellbranch Run watershed which lies outside of the proposed environmentally sensitive development area:
  - 1.** First, the city will approve only those developments that recognize and preserve existing natural features, including but not limited to watercourses, flood plain, and riparian buffers. See C.C.C. § 3372.905.
  - 2.** Second, the city will approve only those developments that minimize the generation of stormwater through site design criteria that reduce stormwater runoff. See C.C.C. § 3372.906.
  - 3.** Third, the city will approve only those developments that manage stormwater through best management practices for both flood control and water quality protection. See C.C.C. §332.07.

*(Ord. 2431-03 § 32; Ord. 0854-2008 § 41.)*

### **3372.902 - Definitions.**

For the purposes of the Hellbranch Run watershed protection overlay only, the following phrases, terms, words, and their derivations have the meaning given herein.

Letter A.

"Agricultural land management practices" means those methods and procedures used in the cultivation of land in order to further crop and livestock production.

"Association" means a legal entity operating under recorded land agreements or contracts through which each unit owner in the development is a member and each dwelling unit is subject to charges for a proportionate share of the expenses of the organization's activities such as maintaining common open space and other common areas and providing services needed for the development. An association can take the form of a homeowners' association, community association, condominium association or other similar entity.

Letter B.

"Best management practices" or BMPs mean management practices or structural practices designed to reduce the quantities of pollutants, such as sediment, nitrogen, phosphorus, and animal wastes washed by rain or snow melt into nearby receiving waters.

Letter D.

"Development" means any human-made change to improved or unimproved real estate, including but not limited to buildings or structures, mining, dredging, filling, grading, paving, excavating or drilling operations or storage of equipment or materials.

"Director" means the Director of the Department of Development or the Director's designee.

Letter E.

"Environmentally sensitive development area" or proposed environmentally sensitive development area (ESDA) means

the territory identified as such by the Columbus Metropolitan Facilities Plan Update (November 3, 2000) as filed with the Ohio Environmental Protection Agency.

Letter F.

"Floodplain" or "100-year flood plain" means a river or other watercourse and its adjacent area subject to inundation by the "base flood." The "floodplain" or "100-year flood plain" is also known as "special flood hazard area" and is composed of the "floodway" and "floodway fringe." Special flood hazard areas are designated by the Federal Emergency Management Agency as Zone A, AE, AH, AO, AI-30 or A99.

"Floodway" means that portion of the "special flood hazard area," excluding the "floodway fringe," which is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood" without cumulatively increasing the water surface elevation by more than one-half foot.

"Floodway fringe" means that portion of the "special flood hazard area," excluding the "floodway," which is subject to inundation by the "base flood."

Letter I.

"Impervious cover" means any surface resulting from development that cannot effectively absorb or infiltrate rainfall and includes "impervious area" as defined by C.C.C. § 1 149.02.006.

Letter N.

"Natural channel design" means the process by which new or restored watercourse channels are designed to be naturally functional and self-sustaining, such that they emulate dynamically stable watercourses.

Letter O.

"Open space" means an area that is intended to provide light and air. Open space may include, but is not limited to, publicly or privately owned meadows, wooded areas, watercourses, wetlands, and flood plains. Open space does not include:

- (a) Private roads and public road rights-of-way;
- (b) Parking areas, accessways, and driveways;
- (c) Required setbacks between buildings, parking areas, and project boundaries;
- (d) Required setbacks between buildings and streets;
- (e) Required minimum spacing between buildings, and between buildings and parking areas;
- (f) Private yards;
- (g) Other small fragmented or isolated open areas that have a dimension less than 50 feet in any direction.

Letter P.

"Paving blocks" means cement or plastic grids with void spaces. Paving blocks make the surface more rigid and gravel or grass planted inside the holes allows for infiltration. Depending on the use and soil types, a gravel layer can be added underneath to prevent settling and allow further infiltration.

"Permeable or semi-permeable material" means paving blocks or porous pavement.

"Porous pavement" means permeable pavement surface with an underlying stone reservoir that temporarily stores surface runoff before infiltrating into the subsoil. This porous surface replaces traditional pavement, allowing parking lot runoff to infiltrate directly into the soil and receive water quality treatment. There are several pavement options, including porous asphalt, pervious concrete, and grass pavers. Porous asphalt and pervious concrete appear the same as traditional pavement from the surface, but are manufactured without "fine" materials, and incorporate void spaces to allow infiltration. Grass pavers are concrete interlocking blocks or synthetic fibrous grid systems with open areas designed to allow grass to grow within the void areas.

Letter S.

"Stream corridor protection zone" means the area of the floodplain that is necessary to maintain or allow redevelopment of a functional natural drainage system capable of flood storage during common flood events, separating fine sediments from discharge and assimilating pollutants, and recharging stream base flow and ground water. The width of the stream corridor protection zone (Z), as measured in feet, is based upon the size of the drainage area of the watercourse, but in no case may the stream corridor protection zone be less than the floodway. To determine Z, calculate the drainage area (DA) of the watercourse at the downstream end of the proposed development site.

- a. When DA is equal to or greater than 16 square miles, then  $Z = 87 \text{ DA}^{0.43} + 100'$ ;
- b. When DA is less than 16 square miles, then  $Z = 117 \text{ DA}^{0.43}$ ; and
- c. When DA is equal to or less than 90 acres, then  $Z = 50'$ .

In most instances, the stream corridor protection zone is located by placing the centerline of the zone over the centerline of the watercourse. However, individual site conditions, including but not limited to valley topography, must be reviewed to determine the precise location of the stream corridor protection zone.

Letter U.

"Upland" means land generally at a higher elevation than and extending inland from the watercourse.

Letter W.

"Watercourse" means any ephemeral, intermittent, perennial, natural or manmade creek, ditch (excepting any roadside ditch), river, or stream with a defined bed, bank or channel.

(Ord. 0854-2008 § 42.)

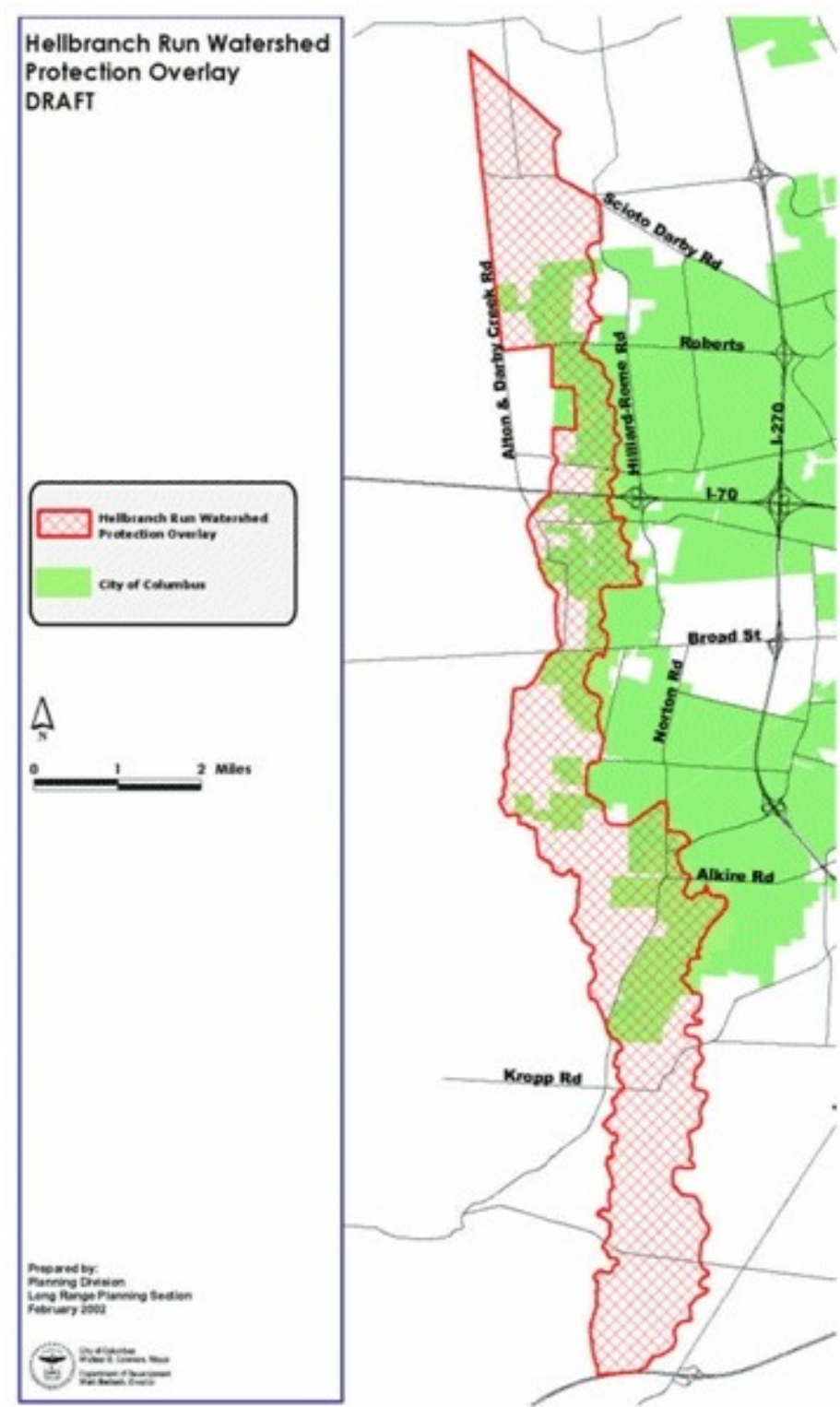
3372.903 - Overlay boundaries.

The Hellbranch Run Watershed Protection Overlay is comprised of all parcels within the geographic area that is naturally tributary to the Hellbranch Run, including areas tributary to the Clover Groff ditch, which lie outside of the proposed Environmentally Sensitive Development area and which upon the effective date of this overlay were not subject to an approved preliminary plat or to a properly recorded final subdivision plat or condominium declaration. The Hellbranch Run Watershed Protection Overlay includes the territory identified in Appendix A. However, any area which is not tributary to the Hellbranch Run Watershed shall not be included within the Hellbranch Run Watershed Protection Overlay regardless of whether it is included within Appendix A.

(Ord. 2431-03 § 35; Ord. 0854-2008 § 43.)

Appendix B.

Hellbranch Run Watershed Protection Overlay



3372.904 - Application and exemptions.

- A. Application. Any city action affecting development of a parcel of land within the Hellbranch Run Watershed Protection Overlay, including but not limited to rezoning, subdivision approval, floodplain alteration approval, stormwater plan review, and zoning clearance is subject to the requirements of the Hellbranch Run Watershed Protection Overlay. In the event of conflict with other provisions of the city codes, the more environmentally protective standard shall apply.
- B. Exemptions. The following development activities are exempt from the provisions of this zoning overlay:
  - 1. Agricultural land management practices;
  - 2. Additions or modifications to existing single-family structures which are not part of a platted and recorded subdivision or the use, construction or maintenance of structures ordinarily appurtenant thereto, such as but not

limited to, recreational equipment, outbuildings, fences, pavilions, and swimming pools.

3. Streambank stabilization/erosion control measures. Streambank stabilization/erosion control measures which are ecologically compatible and substantially utilize natural materials and native plant species where practical and available. Such streambank stabilization/erosion control measures shall only be undertaken upon approval by the director of the department of public utilities or the director's designee of a streambank stabilization plan that provides long-term streambank protection. In reviewing this plan, the director may consult with a representative of the Ohio Department of Natural Resources, Division of Natural Areas and Preserves; Ohio Environmental Protection Agency, Division of Surface Water; Franklin County Soil and Water Conservation District; or other technical experts as necessary.

(Ord. 0854-2008 § 44.)

### **3372.905 - Standards for preserving existing natural features.**

Development of a lot or parcel within the Hellbranch Run Watershed Protection Overlay is subject to the following standards intended to preserve existing natural features of the property that promote flood control and protect water quality.

- A. Watercourse Preservation. All watercourses shall remain open and shall not be enclosed within a storm sewer or other engineered structure. Channelization or other physical alterations may only be permitted when no other practicable alternative exists and when natural channel design principles are implemented in a manner approved by the director of public utilities or the director's designee. Compliance with the requirements of this section does not supplant any other applicable federal or state permitting requirements.
- B. Floodplain Preservation. Neither the total 100 year flood storage capacity nor the total area of the 100 year floodplain shall be reduced. Floodplain fill permits may be granted for fill outside the limits of the stream corridor protection zone upon demonstration by the applicant that any net loss of both the area and the flood storage volume of the 100 year floodplain will be fully mitigated within the watershed at a site as close as practicable to the area of fill through either the creation of new floodplain or the management and treatment of additional flood volumes equal to those which would have been managed and treated within the lost floodplain.
- C. Stream Corridor Protection. The stream corridor protection zone shall be kept in as natural state as possible so that it can perform its inherent function of flood storage and water quality protection.
  1. The applicant shall identify on the plat or plan and visibly delineate on the site the stream corridor protection zone prior to any development of the site to prevent excursions onto the zone during construction. Such delineation must be submitted to the director of public utilities or the director's designee for review and approval prior to construction.
  2. No later than the conclusion of construction, the applicant shall permanently delineate the stream corridor protection zone in an aesthetically harmonious manner, approved by the director, such that the location of the zone is apparent to a casual observer and that permits access to the zone.
  3. Land managed in compliance with this overlay and designated as a stream corridor protection zone may, at the option of the land owner, be deeded in fee simple to the city of Columbus.
  4. That portion of a lot or parcel reserved as the stream corridor protection zone may be included in the total area for computing the density permitted by the particular underlying zoning district for that parcel even if ownership of the stream corridor protection zone is subsequently transferred. The resulting increase in net density permitted on that portion of the lot or parcel located outside of the stream corridor protection zone is acceptable to the extent that the gross density for the total area does not exceed the density prescribed by the underlying zoning district.
  5. Designated stream corridor protection zones, located outside of the floodway, shall be credited toward the open space or parkland set aside required in Chapter 3318 of the Columbus City Codes; provided, however, the stream corridor protection zone may not constitute more than 50 percent of such open space or parkland set aside requirement without the express written consent of the director of recreation and parks.
  6. Permitted Uses. No use permitted under these regulations shall be construed as allowing trespass on privately held lands.
    - a. Passive Uses. Uses that are passive in character shall be permitted in stream corridor protection zones, including, but not limited to, passive recreational uses, as permitted by federal, state, and local laws, such as hiking, fishing, hunting, picnicking, and similar uses. Construction of paved trails to further such passive recreation uses is also authorized. However, trails that become damaged due to natural erosion shall not be repaired but shall be moved upland or removed altogether.
    - b. Removal of Damaged or Diseased Trees. Damaged or diseased trees may be removed. Due to the potential for felled logs and branches to damage downstream properties and/or block ditches or otherwise exacerbate flooding, logs and branches resulting from the removal of damaged or diseased trees that are greater than six inches in diameter at the cut end shall be cut into sections no longer than six feet, anchored to the shore, or removed from the 100 year floodway.
    - c. Revegetation and/or Reforestation. Revegetation and/or reforestation of the stream corridor protection zone using approved species pursuant to Appendix B. Appendix B lists species of shrubs and vines recommended for stabilizing flood prone areas and/or constructing wetlands for the Hellbranch Run watershed.
    - d. Public Utilities. Sanitary sewer, storm sewer and/or water lines and public utility transmission lines may be located within the stream corridor protection zone, and disturbances of the zone necessary to place and/or maintain such utilities are also authorized. The placement, construction and maintenance of such utilities shall minimize disturbance to riparian areas and shall mitigate any necessary disturbances.
    - e. Existing Crossings and New Arterial Streets. Construction and operation, including maintenance, widening, and new construction of any existing crossing or bridge or new arterial street or arterial street bridge, as that term is defined in C.C.C. § 3123.03. A new crossing or new roadway for a street other than an arterial may be permitted to cross the stream corridor protection zone only in those circumstances when the parcel has no other

- f. Disturbances of the zone necessary to accomplish the uses described in paragraphs a through e of this subsection are also authorized. However, all such disturbances shall be minimized and any necessary disturbances shall be mitigated.
7. Prohibited Uses. Any use not authorized under these regulations shall be prohibited in the stream corridor protection zone. By way of example, the following uses are specifically prohibited, however, prohibited uses are not limited to those examples listed here:
  - a. Construction. There shall be no structures of any kind.
  - b. Dredging or Filling. There shall be no drilling, filling, dredging, grading, or dumping of soil, spoils, liquid, or solid materials. No floodplain fill permits may be granted for area within the steam corridor protection zone.
  - c. Roads or Driveways. There shall be no new roads or driveways other than arterial streets as that term is defined in C.C.C. § 3123.03.
  - d. Motorized Vehicles. There shall be no use of motorized vehicles.
  - e. Disturbance of Natural Vegetation. There shall be no disturbance of the natural vegetation at any time including during construction on the remainder of the site, except for such conservation maintenance that the landowner deems necessary to control noxious weeds; for such plantings as are consistent with these regulations; and for the passive enjoyment, access, and maintenance of landscaping or lawns existing at the time of passage of these regulations.
  - f. Parking Lots. There shall be no parking lots or other human made impervious cover.
  - g. New Surface and/or Subsurface Sewage Disposal or Treatment Areas. Stream corridor protection zones shall not be used for the disposal or treatment of sewage except for those treatment and/or disposal systems existing at the time of passage of these regulations when such systems are properly permitted in accordance with the city of Columbus or Franklin County health departments and/or Ohio Environmental Protection Agency regulations.

## Appendix B.

## Native Plants for Use in Hellbranch Area

\* Plants must be the species to ensure the use of natives. Go by exact scientific name (not common name).

## Conifers

Eastern Red Cedar (*Juniperus virginiana*)

## Vines

## Virginia Creeper (*Parthenocissus quinquefolia*)

## Shrubs

### Spicebush (*Lindera benzoin*)

Serviceberry (Amelanchier arborea)

Buttonbush (*Cephalanthus occidentalis*)

### Mapleleaf Viburnum (*Viburnum acerifolium*)

Arrowwood Viburnum ( *Viburnum dentatum*)

Silky Dogwood (*Cornus amomum*)

## Trees

Boxelder (*Acer negundo*)

Sugar Maple (*Acer saccharum*)

Red Maple (*Acer rubrum*)

Hackberry (*Celtis occidentalis*)

Tulip (*Liriodendron tulipifera*)

Bur Oak (*Q. macrocarpa*)

Black Oak (*Quercus velutina*)

Red Oak (*Quercus rubra*)

Shingle Oak (*Quercus imbricaria*)

Swamp White Oak (*Quercus bicolor*)

White Oak (*Quercus alba*)

Chinquapin Oak (*Quercus muhlenbergii*)Black Willow (*Salix nigra*)

Sycamore (*Platanus occidentalis*)

Eastern Hophornbeam (*Ostrya virginiana*)

Ironwood (*Carpinus caroliniana*)

Flowering dogwood (*Cornus florida*)

Staghorn Sumac (*Rhus typhina*)

Butternut (*Juglans cinerea*)

Mockernut Hickory (*Carva tomentosa*)

Shagbark Hickory (*Carya ovata*)

Pignut Hickory (*Carya glabra*)

Green Ash (*Fraxinus pennsylvanica*)

Blue Ash (*Fraxinus quadrangulata*)

White Ash (*Fraxinus americana*)

Honeylocust (*Gleditsia tricanthos*)

American Elm (*Ulmus americana*)

American Elm (*Ulmus amer*)  
Slippery Elm (*Ulmus rubra*)

Slippery Elm (*Ulmus rubra*)  
Black Cherry (*Prunus serotina*)

Common Chokecherry (*Prunus virginiana*)  
American Basswood (*Tilia americana*)  
Ohio Buckeye (*Aesculus glabra*)  
Pawpaw (*Asimina triloba*)

**Grasses, Sedges, Rushes and Horsetails**

Big Bluestem (*Andropogon gerardi*)  
Sideoats Grama (*Bouteloua curtipendula*)  
Little Bluestem (*Schizachyrium scoparium*)  
Indian Grass (*Sorghastrum nutans*)  
Nodding Wild Rye (*Elymus Canadensis*)  
Fowl Manna Grass (*Glyceria striata*)  
Blunt Spike Rush (*Eleocharis obtusa*)  
Bristly Sedge (*Carex comosa*)  
Awl-fruited Sedge (*Carex stipata*)  
Fox Sedge (*Carex vulpinoidea*)  
Hardstem Bulrush (*Scirpus acutus*)  
River Bulrush (*Scirpus fluviatilis*)  
Soft-stem Bulrush (*Scirpus validus*)  
Common Rush (*Juncus effusus*)

**Flowers**

New England Aster (*Aster nova angliae*)  
Spotted Jewelweed (*Impatiens capensis*)  
Black-eyed Susan (*Rudbeckia hirta*)  
Common Milkweed (*Asclepias syriaca*)  
Butterfly Milkweed (*Asclepias tuberosa*)  
Thistle (*Cirsium discolor*)  
Purple Coneflower (*Echinacea purpurea*)  
Joe Pye Weed (*Eupatorium maculatum*)  
Boneset (*Eupatorium perfoliatum*)  
Rough Blazing Stars (*Liatris aspera*)  
Wild Bergamot (*Monarda fistulosa*)  
Common Evening Primrose (*Oenothera biennis*)  
Stiff Goldenrod (*Solidago rigida*)  
Late Goldenrod (*Solidago gigantea*)  
Early Goldenrod (*Solidago juncea*)  
Prairie False Indigo (*Baptisia lactea*)  
Virginia Bluebells (*Mertensia virginica*)  
Hairy Penstemon (*Penstemon hirsutus*)  
Grayhead Priarie Coneflower (*Ratibida pinnata*)  
Rosinweed (*Silphium trifoliatum*)  
Cup Plant (*Silphium perfoliatum*)  
Golden Alexanders (*Zizia aurea*)  
Queen-of-the-prairie (*Filipendula rubra*)  
Bloodroot (*Sanguinaria canadensis*)  
Jack-in-the-pulpit (*Arisaema triphyllum*)  
Large-flowered Trillium (*Trillium grandiflorum*)  
Wild Geranium (*Geranium maculatum*)  
Wild Blue Phlox (*Phlox divaricata*)  
Yarrow (*Achillea millefolium*)  
Columbine (*Aquilegia canadensis*)  
Biennial Gaura (*Gaura biennis*)

**Moist Areas**

Swamp Milkweed (*Asclepias incarnata*)  
Marsh marigold (*Caltha palustris*)  
Blue Flag Iris (*Iris virginica*)  
Cardinal Flower (*Lobelia cardinalis*)  
Michigan Lily (*Lilium michiganense*)  
Common Water Plantain (*Alisma subcordatum*)  
Nodding Beggarticks (*Bidens cernua*)  
Common Beggarticks (*Bidens frondosa*)  
Common Sneezeweed (*Helenium autumnale*)  
Blue Vervain (*Verbena hastata*)  
Turtlehead (*Chelone glabra*)

(Ord. 0854-2008 § 45.)

**3372.906 - Standards for minimizing stormwater generated.**

Development of a lot or parcel within the Hellbranch Run watershed protection overlay is subject to the following standards intended to minimize the stormwater generated from the development site.

- A. Street Widths. No alley, boulevard, close, collector, commercial street, lane, or street, as those terms are defined in the Traditional Neighborhood Development Article at C.C.C. § 3320.03, shall be any wider than the standard prescribed in the Thoroughfare Standards Table in Traditional Neighborhood Development Article at C.C.C. § 3320.15.
- B. Replanting. Where natural vegetation does not exist within the stream corridor protection zone, native riparian tree species and other native vegetation, as identified in Appendix B, shall be planted. Replanting in the stream corridor protection zone minimizes stormwater runoff by intercepting rainwater on leaves, branches, and trunks allowing intercepted water to evaporate into the atmosphere, by improving water



infiltration characteristics of the soil, by slowing down stormwater runoff, and by stabilizing banks.

- C. Other Stormwater Minimization Practices.** Development is encouraged to be designed to incorporate other stormwater minimization design practices including but not limited to:
1. **Minimize Commercial Parking.** Minimize parking lots as that term is defined by C.C.C. § 3303.16, by including only the number of parking spaces anticipated to be necessary for regular use, but not less than the minimum defined by C.C.C. § 3342.28(B). If parking spaces in excess of those required for regular use are desired, such spaces may be constructed using permeable or semi-permeable materials when soil conditions are appropriate.
  2. **Open Space Reservation.** Preserve open space in the 100 year floodplain to the maximum extent practicable, by clustering development outside of the floodplain. Areas designated for open space may be preserved in their natural state, designed and intended for the use and/or enjoyment of residents of the proposed development, utilized for stormwater management BMPs or utilized for farming when authorized in a conservation easement or within the association's covenants and restrictions. At the option of the land owner, open space reserved pursuant to this section may be prohibited from further subdivision or from development, excepting development associated with acceptable uses herein, by deed restriction, conservation easement, or other agreement in a form acceptable to the city attorney and duly recorded in the office of the recorder of deeds of Franklin County.
  3. **Impervious Cover Reduction.** Minimize impervious surfaces by utilizing permeable or semi-permeable material to the maximum extent practicable.

(Ord. 0854-2008 § 46.)

### **3372.907 - Standards for implementing stormwater best management practices.**

Development of a lot or parcel within the Hellbranch Run watershed overlay is subject to the following general principles intended to implement stormwater best management practices within the development site. The director of public utilities shall promulgate through regulations standards to implement these general principles.

- A. Detention and Treatment.** Stormwater generated as the result of development shall be managed using best management practices such as extended detention, natural or constructed wetlands, or other approved means to the extent necessary to meet water quality pollutant removal goals, reduce channel erosion, prevent overbank flooding, and pass extreme floods. The applicant shall demonstrate that the stormwater management practices for the development site are designed to:
1. Capture and treat 90 percent of the average annual stormwater runoff volume (water quality volume - WQv);
  2. Provide 24-hour extended detention of the post-developed one year, 24-hour storm event (channel protection storage volume - Cpv);
  3. Control the peak discharge of the post-development runoff volume from the ten-year, 24-hour storm event to the ten-year predevelopment peak discharge rate (overbank flood protection discharge volume) unless a watershed hydraulic model indicates the ten-year control is not needed on the site; and
  4. Control the peak discharge of the post-development runoff volume from the 100-year, 24-hour storm event to the 100-year pre-development peak discharge rate (extreme flood volume - Qf), unless the site is smaller than five acres or a regional flood model indicates the 100-year control is not needed for the site.
- B. Conveyance.** All stormwater generated as the result of development shall flow into the nearest receiving stream or approved storm sewer drainage system without increasing flood depths or causing standing water either upstream or downstream. To assure that this goal will be achieved, the applicant must affirmatively demonstrate that: between the proposed development site and the point in the receiving watercourse at which the proposed development site is ten percent of the total area tributary, post-development stormwater peak rate of runoff for the ten-year, 24-hour storm event will be less than or equal to the pre-development stormwater peak rate of runoff.

(Ord. 2431-03 § 41; Ord. 0854-2008 § 47.)

### **3372.908 - Site redevelopment.**

Repealed by Ordinance 0854-2008.

### **3372.909 - Variance.**

Variances from the standards of the Hellbranch Run watershed protection overlay may be granted pursuant to C.C.C. § 3307.09 and/or § 3307.10. In addition to the factors provided in those sections, the board of zoning adjustment or the city council shall consider whether the proposed variance provides flood and water quality protection equal to or superior than that provided within this overlay.

(Ord. 2431-03 § 43; Ord. 1461-05 § 1; Ord. 0854-2008 § 48.)

### **3372.910 - Regulations.**

The director of development and/or the director of public utilities may adopt regulations necessary to administer and enforce the provisions of the Hellbranch Run Watershed Protection overlay. Regulations promulgated, pursuant to this section by either director shall be published in the City Bulletin, with copies of the regulations being available for public review at the director's office and other locations that may be designated by the director. No person shall violate any regulation adopted by the director pursuant to this chapter.

(Ord. 2431-03 § 44; Ord. 0854-2008 § 49.)

### **3372.912 - Landscaping and screening.**

Repealed by Ordinance 0854-2008.

**3372.914 - Lighting.**

- A. For general lighting, including parking lots, cut-off down lighting is required. For less intense pedestrian lighting, globe lighting may be used provided the level is no more than 4,000 lumens per fixture. All lights must be directed or shielded so as to avoid off-site light spillage.
- B. All external outdoor lighting fixtures, which are being used for the same purpose, within a given development must be from the same or similar manufacturer's type to insure aesthetic compatibility.
- C. Parking lot lighting must be in accordance with the following standards:
  - 1. Light fixtures must not exceed 20 feet above grade when located on a lot or premise of two acres or less:
  - 2. Light fixtures must not exceed 28 feet above grade when located on a lot or premise of more than two acres:
  - 3. When located within 25 feet of a residential district the height of a light fixture must not exceed 14 feet above grade: and
  - 4. In parking lots, lights must be placed in parking lot islands or on a solid base to protect both lights and vehicles from possible damage.
- D. All on-site utilities, within a new development or a 50 percent or greater expansion of a building's gross floor area, must be underground.
- E. Gasoline service station canopy lighting must be recessed within a canopy and use an opaque shield around the sides of a light.
- F. Searchlights are prohibited.

*(Ord. 2341-03 § 46.)*

**3372.970 - Morse Road Regional Commercial Overlay.**

Repealed by Ordinance 0854-2008.

**3372.978 - Olentangy River Road Regional Commercial Overlay.**

Repealed by Ordinance 0854-2008.